

20. An electrode according to claim 18, wherein the electrode further comprises a release liner disposed upon an exposed surface of the conductive adhesive layer.

21. The electrode according to claim 18, wherein the portion of the conductive adhesive layer that has been hot-pressed is a perimetrical portion.

22. The electrode according to claim 18, further comprising an indentation that separates the heat-pressed portion of the conductive adhesive layer from the remaining portion of the conductive adhesive layer.

23. An electrode according to claim 18, wherein the conductor is in the form of a layer of conductive material and the area of the conductor is essentially coextensive with the area of the electrode support.

24. An electrode according to claim 18, wherein the conductor comprises a conductive ink.

25. An electrode according to claim 18, wherein the conductive adhesive layer comprises: (a) a hydrophilic phase comprising hydrophilic polymer material, an electrolyte, and a humectant, and (b) a hydrophobic phase comprising hydrophobic polymer derived from the polymerization of hydrophobic monomer or oligomer in the presence of a surfactant and the hydrophilic phase.

26. An electrode according to claim 25, wherein the conductive adhesive layer consists essentially of: (a) a hydrophilic phase comprising hydrophilic polymer material, an electrolyte, and a humectant, and (b) a hydrophobic phase comprising hydrophobic polymer derived from the polymerization of hydrophobic monomer or oligomer in the presence of a surfactant and the hydrophilic phase.

27. An electrode according to claim 25, wherein the hydrophilic polymer material is selected from the group consisting of polymers containing one or more polyethylene glycol groups or polymers containing one or more pyrrolidone groups.

28. An electrode according to claim 25, wherein the electrolyte is selected from the group consisting of aqueous solutions of-. potassium chloride, sodium chloride or lithium chloride.

29. An electrode according to claim 25, wherein the humectant is selected from the group consisting of propylene glycol or sodium DL-pyrrolidonecarboxylate.

30. An electrode according to claim 25, wherein the hydrophobic polymer comprises interpolymerized units derived from one or more of the following monomers: acrylic acid, isoctyl acrylate, 2-ethylhexyl acrylate and n-butyl acrylate.

31. An electrode according to claim 18, wherein the adherend is mammalian skin.

32. An electrode according to claim 25, wherein the adherend is mammalian skin.

(33.) A method of improving the adhesion strength of a conductive adhesive layer comprising a hydrophilic phase and a hydrophobic phase by hot-pressing a portion of the conductive adhesive layer.

34. The method according to claim 33, wherein the hot-pressed portion is a perimetrical portion.

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35. The method according to claim 33, further comprising forming pinholes in the portion of the conductive adhesive layer to be hot-pressed prior to hot pressing.

It is believed that this Application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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